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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,716	04/16/2004	Daniel V. Palanker	S02-038/CON	8810

30869 7590 06/06/2006

LUMEN INTELLECTUAL PROPERTY SERVICES, INC.  
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PALO ALTO, CA 94306

EXAMINER
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VRETTAKOS, PETER J

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/825,716	PALANKER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Peter J. Vrettakos	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

**Restriction requirement withdrawn.**

***The Applicant must submit replacement IDS with the instant application number listed at the top. Currently submitted IDS (no or incorrect application number listed at top) will not be considered.***

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. “[R]eflection of voltage transients” is neither found in the specification, nor disclosed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. “[R]eflection of voltage transients” is indefinite.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1,2,3,9 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Eggers et al. (6,047,700).**

Eggers discloses a cutting wire (252 – figure 5) electrode (104) with elongate cutting portion (circular cross section – figure 3, 104; a bend – figure 4, return electrode (112), voltage source (20) with pulse control (30) permitting the claimed pulse parameters including micropulses within minipulses (Eggers indirectly discloses peak power control, duration control, and a modulation format with pulse power, duration, and interval in col. 12 beginning at line 54 where Eggers discloses variability in parameters (such as power level) as dictated by the application (cardiac versus dermatological, etc.)) for creating a vapor cavity (col. 3:46-55) for purposes of cutting biological tissue (calcified deposits – see patent title).

Eggers discloses a structurally equivalent device anticipating the Applicant's functional language toward, "preventing charge transfer." The claim is anticipated because it does not include any structural elements not found in Eggers. Further, the Examiner contends that the structurally equivalent Eggers' device is capable of "preventing charge transfer."

Eggers discloses a frequency range that overlaps the Applicant's pulse duration

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range (col. 12:45-46). Note to reader: frequency and pulse duration are inversely related.

Eggers depicts an aspect ratio (length to width) larger than one (electrode tips element 107).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 4-5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers in view of Lewis et al. (6,620,160).**

Lewis et al. is presented to show that the prior art discloses throughout the patent electrodes (that are easily substitutable into Eggers) of sizes/dimensions similar to the Applicant's.

Although Lewis does not expressly disclose a cutting portion of an electrode, Eggers does as depicted in figure 8a, thereby making the rejection valid toward Applicant's disclosure of an electrode with a cutting portion. Lewis is presented for its express disclosure of electrode dimensions (diameter), which one could use in the design of the Eggers electrodes. Lewis' lack of a "cutting portion" of an electrode as defined by the Applicant is not important to the construction of this rejection.

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify Eggers in view of Lewis by including specific dimensions for the cutting electrode. The motivation would be to use electrode sizes that are functional as seen in the prior art.

**Claims 6-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers in view of Savage (6,113,594).**

Eggers neglects to disclose a looped and bent translatable cutting electrode with a circular cross section.

Savage discloses in an analogous device and method of use a **looped and bent** translatable (col. 6:27-31) cutting electrode (14) with a circular cross section, return electrode (16), voltage source (34), conductive liquid (col. 8:43), and pulse control (36,38).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify Eggers in view of Savage by including alternate designs for the cutting electrode. The motivation would be to provide a choice to the constructor of the device, which would be determined by the specific application for which the device is to be used.

**Claims 11, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers in view of McGreevy et al. (4,781,175).**

Eggers neglects to disclose awareness of arc discharges, cutting portion

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temperatures, charge transfer, and RC circuits.

McGreevy discloses in an analogous device and method of use awareness awareness of arc discharges (arc sense circuit 316, col. 15:42 through col. 16:17), cutting portion temperatures above 100 degrees Celsius (col. 4:7-11), prevention of charge transfer (filters 506,508, 528,530, figure 15), and RC circuits (resistors and capacitors depicted in figure 15).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify Eggers in view of McGreevy by including an arc sense circuit. The motivation would be to provide feedback control to the device as posited in McGreevy col. 15:42 through col. 16:17 for more effective operation.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claims 1-34 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No.**

**6,780,178.** Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims disclose apparatus and method for cutting a material submerged in a conductive medium.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Vrettakos whose telephone number is 571-272-4775. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pete Vrettakos  
May 10, 2006



  
ROY D. GIBSON  
PRIMARY EXAMINER